

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/004527

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B67D5/70

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 B67D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	FR 2 813 872 A (FMC EUROPE) 15 March 2002 (2002-03-15) cited in the application page 3, line 25 - page 4, line 14; figures 1-8	1-13
Y	FR 1 415 279 A (PARKER HANNIFIN CORP) 22 October 1965 (1965-10-22) page 1, column 1, line 34 - line 41 page 2, column 1, line 31 - page 2, column 2, line 20; figures 1,2,9	1-13
A	US 6 343 620 B1 (LEDEVEHAT EUGENE ET AL) 5 February 2002 (2002-02-05)	
A	US 4 299 261 A (TALAFUSE LARRY J) 10 November 1981 (1981-11-10)	
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

29 July 2004

Date of mailing of the international search report

02/09/2004

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PCT/EP2004/004527

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 01/04041 A (LE DEVEHAT RENAUD ; FMC EUROPE (FR)) 18 January 2001 (2001-01-18) -----	
A	GB 1 591 646 A (EMH) 24 June 1981 (1981-06-24) -----	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/004527

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
FR 2813872	A	15-03-2002	FR 2813872 A1	15-03-2002
			AU 9001401 A	26-03-2002
			CA 2422121 A1	21-03-2002
			CN 1458903 T	26-11-2003
			EP 1322544 A1	02-07-2003
			WO 0222491 A1	21-03-2002
			JP 2004509027 T	25-03-2004
			NO 20031153 A	09-05-2003
			US 2004099336 A1	27-05-2004
FR 1415279	A	22-10-1965	NONE	
US 6343620	B1	05-02-2002	FR 2793235 A1	10-11-2000
			AT 247598 T	15-09-2003
			AU 759005 B2	03-04-2003
			AU 4305900 A	17-11-2000
			BR 0011222 A	19-03-2002
			CA 2371529 A1	09-11-2000
			CN 1131169 B	17-12-2003
			DE 60004661 D1	25-09-2003
			DE 60004661 T2	17-06-2004
			EP 1181238 A1	27-02-2002
			ES 2206226 T3	16-05-2004
			WO 0066484 A1	09-11-2000
			JP 2002543011 T	17-12-2002
			NO 20015370 A	02-01-2001
			ZA 200108817 A	20-02-2003
US 4299261	A	10-11-1981	BR 7908021 A	08-07-1980
			CA 1128406 A1	27-07-1982
			DE 2964502 D1	17-02-1983
			DK 523779 A	12-06-1980
			EP 0012518 A1	25-06-1980
			ES 486717 A1	16-06-1980
			JP 55089100 A	05-07-1980
			NO 793928 A	12-06-1980
WO 0104041	A	18-01-2001	FR 2796375 A1	19-01-2001
			AT 261910 T	15-04-2004
			AU 6296300 A	30-01-2001
			CA 2378652 A1	18-01-2001
			CN 1420841 T	28-05-2003
			DE 60009073 D1	22-04-2004
			EP 1196347 A2	17-04-2002
			WO 0104041 A2	18-01-2001
			JP 2003511284 T	25-03-2003
			NO 20020136 A	11-03-2002
			US 6719008 B1	13-04-2004
			ZA 200200023 A	28-07-2003
GB 1591646	A	24-06-1981	FR 2367700 A1	12-05-1978
			AR 223308 A1	14-08-1981
			BR 7706879 A	11-07-1978
			CA 1086183 A1	23-09-1980
			DE 2745890 A1	20-04-1978
			ES 463251 A1	16-07-1978
			JP 1329455 C	30-07-1986
			JP 53049322 A	04-05-1978

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/004527

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
GB 1591646	A	JP 60055400 B	04-12-1985
		NL 7711310 A	18-04-1978
		NO 773523 A ,B,	18-04-1978
		SU 955850 A3	30-08-1982
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